

show hardware

This chapter includes the **show hardware** command output tables.

Important The nomenclature appearing in the outputs of **show hardware** commands vary based on platform (VPC, ASR 5000, ASR 5500), card type, date of manufacture, and the StarOS release.

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show hardware (VPC-DI)

In a VPC-DI instance, card numbers correspond to the virtual slot numbers assigned to the virtual machines (VMs) that run StarOS within the virtual chassis created by hypervisor templates.

Table 1: show hardware Command Output Descriptions (VPC-DI)

Field	Description
Control Function and Service Function Cards	
Card <number>	Virtual slot number of the specified card. Slots 1 and 2 = CF; Slots 3 – 48 = SF.
Card Type	Control Function Virtual Card or 1-Port Service Function Virtual Card.
CPU Packages	Number of vCPUs.
CPU nodes	Number of CPU nodes.

Field	Description
CPU Cores/Threads	Number of cores/threads.
Memory	vMemory in Megabytes
Platform	Hypervisor type.
CFE/Diags	Common Firmware Environment/Diagnostic firmware.
Network Interfaces	
cpeth0	VPC-DI network communication port.
Address	MAC address.
Device	Device type.
ID	VPC-DI identifier (hexadecimal).
Driver	Driver type.
RxQ(s)/RINGSZ/COALESCE	Receive queue information from hypervisor.
TxQ(s)/RINGSZ/COALESCE	Transmit queue information from hypervisor.
loeth0	**CF only:** LOCAL management port (Console).
Address	MAC address.
Device	Device type.
ID	VPC-DI identifier (hexadecimal).
Driver	Driver type.
RxQ(s)/RINGSZ/COALESCE	Receive queue information from hypervisor.
TxQ(s)/RINGSZ/COALESCE	Transmit queue information from hypervisor.
port_*slot_port*	**SF only:** Service port.
Address	MAC address.
Device	Device type.
ID	VPC-DI identifier (hexadecimal).
Driver	Driver type. (alphanumeric string)
RxQ(s)/RINGSZ/COALESCE	Receive queue information from hypervisor.
TxQ(s)/RINGSZ/COALESCE	Transmit queue information from hypervisor.
Storage Devices	
Virtual Flash	Indicates whether or not the virtual /flash drive is Present.

Field	Description
Type	Virtual drive type (alphanumeric string).
Model	Virtual drive model (alphanumeric string).
Hard Drive 1	Indicates whether virtual Hard Drive 1 is Present.
Type	Virtual drive type (alphanumeric string).
Model	Virtual drive model (alphanumeric string).
Hard Drive 2	Indicates whether virtual Hard Drive 2 is Present.
USB 1	Indicates whether virtual USB port 1 is Present (must be configured via hypervisor).
USB 2	Indicates whether virtual USB port 2 is Present (must be configured via hypervisor).
CDROM 1	Indicates whether virtual a CDROM is Present (must be configured via hypervisor).
Type	CDROM drive type (alphanumeric string).
Model	CDROM drive model (alphanumeric string).
Card Programmables	Indicates if the software on any of the programmable components on the card is not at the current revision. "up to date" – all software is current "out of date" – identifies one or more components do not have the most current software. "experimental/unreleased" – one or more components have experimental or unreleased software.

show hardware (VPC-SI)

For VPC-SI, the output of this command displays the parameters of the virtual chassis created by the hypervisor in which the StarOS VM runs.

Table 2: show hardware Command Output Descriptions (VPC-SI)

Field	Description
System information	
Platform	Hypervisor type.
UUID/Serial Number	Cisco serial number
CPU Packages	Number of vCPUs.

Field	Description
CPU nodes	Number of CPU nodes.
CPU Cores/Threads	Number of cores/threads.
Memory	vMemory in Megabytes
Storage Devices	
Virtual Flash	Indicates whether or not the virtual /flash drive is Present.
Type	Virtual drive type (alphanumeric string).
Model	Virtual drive model (alphanumeric string).
Hard Drive 1	Indicates whether virtual Hard Drive 1 is Present.
Type	Virtual drive type (alphanumeric string).
Model	Virtual drive model (alphanumeric string).
Hard Drive 2	Indicates whether virtual Hard Drive 2 is Present.
USB 1	Indicates whether virtual USB port 1 is Present (must be configured via hypervisor).
USB 2	Indicates whether virtual USB port 2 is Present (must be configured via hypervisor).
CDROM 1	Indicates whether virtual a CDROM is Present (must be configured via hypervisor).
Type	CDROM drive type (alphanumeric string).
Model	CDROM drive model (alphanumeric string).
Network Interfaces	
loeth0	LOCAL management port IP address and port type.
port1_<10 through 21>	Traffic management port IP address and port type in parentheses.

show hardware card (ASR 5000)

Table 3: show hardware card Command Output Descriptions (ASR 5000)

Field	Description
Common to All Card Types	
Card <number>	Slot number of the specified card.

Field	Description
Card Type	Description of the card in the specified slot, for example "System Management Card".
Card Description	SMC, PSC*x*, FELC, GELC/GLC2, QGLC, XGLC, CLC/CLC2, OLC/OLC2, SPIO, RCC
Part Number	Legacy part number (xxx-xx-xxxx xx).
Serial Number	Legacy part number (alphanumeric string).
CLEI Code, Starent CLEI Code	Common Language Equipment Identifier (CLEI) code.
UDI Product ID	Unique Device Identifier (UDI) Product Identifier (PID).
UDI Version ID	UDI version.
UDI Serial Number	UDI serial number (alphanumeric string).
UDI CLEI Code	UDI Common Language Equipment Identifier (CLEI) code.
UDI Top Assembly Number	UDI for top-level assembly.
UDI TAN Revision	UDI Top Assembly Number (TAN) revision level.
UDI Deviation Number	UDI deviation number (DEVNUM).
MAC Addresses	Media Access Controller hexadecimal starting address in format: xx-xx-xx-xx-xx-xx.
Switch Fabric Modes	Mode type – "control plane" and/or "switch fabric".
Card Programmables	Indicates if the software on any of the programmable components on the card is not at the current revision. "up to date" – all software is current "out of date" – identifies one or more components do not have the most current software. "experimental/unreleased" – one or more components have experimental or unreleased software.
System Management Card	
Compact Flash	Status of PCMCIA flash memory card, for example "Present".
Type	Memory capacity of the Compact Flash card.
Model	Operational card type.
Serial Number	Serial number of this Compact Flash card.
PCMCIA1	Status of front panel Personal Computer Memory Card International Association (PCMCIA) card, for example "Not Present".

Field	Description
Hard Drive 1	Status of this hard drive, for example "Present".
Type	Drive capacity in Mbytes.
Model	Manufacturer and model number.
Serial Number	Serial number of the hard drive.
SRM	Status, Reset, and Monitoring firmware.
BIOS	Basic Input/Output System.
CIF FPGA	Chassis Information (CIF) Field Programmable Gate Array (FPGA) firmware.
CPU 0 Type/Memory	Socket: 0: <processor type>, <processor speed>: Chipset: <chipset_type>, <part_number>, <RAM>
CPU 0 DIMM-A1 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-B1 P/N	Dual In-line Memory Module part number.
CPU 0 CFE/Diags	Common Firmware Environment/Diagnostic firmware.
Packet Processing Card (PSC, PSC2, PSC3, PSCA, PPC)	
NPU Microcode	Firmware running on the Network Processing Unit (NPU).
Slave SCB	Firmware component that allows non-SMC cards to communicate with the SMC over the system control bus (SCB).
PSR, PSR2	Power, Status, and Reset firmware.
BIOS	Basic Input/Output System firmware.
DT FPGA, DT2 FPGA	Data Transport (DT) Field Programmable Gate Array (FPGA) firmware.
CPU 0 Type/Memory	Socket: 0, <processor type>, <processor speed>. Socket: 1, <processor type>, <processor speed>. Chipset: <components>.
CPU 0 DIMM-N0D0 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-N0D1 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-N1D0 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-N1D1 P/N	Dual In-line Memory Module part number.
CPU 1 Type/Memory	<processor type> <processor speed> <memory in MB>
CPU 0 CFE/Diags	Common Firmware Environment/Diagnostic firmware.

Field	Description
Line Cards (SPIO, RCC, FELC, GELC/GLC2, QGLC, XGLC, CLC/CLC2, OLC/OLC2)	
Slave SCB	Firmware component that allows non-SMC cards to communicate with the SMC over the system control bus (SCB).
FPGA	Field-Programmable Gate Array firmware.
SFP Info (Port 1 or 2)	Information about the Small Form-factor Pluggable (SFP) transceivers includes: Vendor Name, Vendor IEEE ID, P/N (part number), S/N (serial number, date.

show hardware card (ASR 5500)

Table 4: show hardware card Command Output Descriptions (ASR 5500)

Field	Description
Common to All Card Types	
Card <number>	Slot number of the specified card.
Card Type	Data Processing Card Management & 20x10Gb I/O Card Management v2 & 4x 100Gb I/O Card System Status Card Fabric & 2x200GB Storage Card
Description	Card type – DPC, DPC2, MIO, MIO2, SSC, FSC.
Starent Part Number	Legacy part number (xxx-xx-xxxx xx).
Cisco Part Number	Cisco part number.
CLEI Code	Common Language Equipment Identifier (CLEI) code.
UDI Serial Number	Unique Device Identifier (UDI) serial number (alphanumeric string).
UDI Product ID	UDI Product Identifier (PID) [alphanumeric string].
UDI Version ID	UDI version (alphanumeric string).
UDI Top Assem Num	UDI for top-level assembly.
Data Processing Card (DPC)	
Daughter Card #3	Daughter card number.

Field	Description
Card Type	DPC CCK Daughter Card (crypto).
Description	DPC_CRYPTO_DC.
Starent Part Number	Legacy part number (xxx-xx-xxxx xx).
UDI Serial Number	UDI serial number (alphanumeric string).
Card Programmables	Indicates if the software on any of the programmable components on the card is not at the current revision. "up to date" – all software is current "out of date" – identifies one or more components do not have the most current software. "experimental/unreleased" – one or more components have experimental or unreleased software.
BCF	Board Control FPGA firmware.
CAF	Control and Availability FPGA firmware.
CPU 0 Type/Memory	Socket 0: <processor type>, <processor speed> Socket 1: <processor type>, <processor speed>
CPU 0 DIMM-N0C0D0 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-N0C1D0 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-N0C2D0 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-N1C0D0 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-N1C1D0 P/N	Dual In-line Memory Module part number.
CPU 0 DIMM-N1C2D0 P/N	Dual In-line Memory Module part number.
CPU 0 BIOS	Basic Input/Output System.
CPU 0 i82599	Intel 10GbE Controller firmware.
CPU 0 i82574	Intel Gigabit Ethernet Controller firmware.
CPU 0 CFE	Common Firmware Environment version.
CPU 1 Type/Memory	Socket 0: <processor type>, <processor speed> Socket 1: <processor type>, <processor speed>
CPU 1 DIMM-N0C0D0 P/N	Dual In-line Memory Module part number.
CPU 1 DIMM-N0C1D1 P/N	Dual In-line Memory Module part number.
CPU 1 DIMM-N0C2D2 P/N	Dual In-line Memory Module part number.

Field	Description
CPU 1 DIMM-N1C0D0 P/N	Dual In-line Memory Module part number.
CPU 1 DIMM-N1C1D1 P/N	Dual In-line Memory Module part number.
CPU 1 DIMM-N1C1D1 P/N	Dual In-line Memory Module part number.
CPU 1 BIOS	Basic Input/Output System.
CPU 1 i82599	Intel 10 GbE Controller firmware.
CPU 1 i82574	Intel Gigabit Controller firmware.
CPU 1 CFE	Common Firmware Environment version.
Management Input/Output (MIO)	
Daughter Card #<number>	Daughter card number.
Card Type	MIO 10x10Gb Daughter Card. MIO CCK Daughter Card (crypto).
Description	MDC MIO_CRYPTO_DC
Starent Part Number	Legacy part number (xxx-xx-xxxx xx)
Cisco Part Number	Cisco part number.
UDI Serial Number	Unique Device Identifier (UDI) serial number [alphanumeric string].
Midplane:	Chassis EPROM information.
Card Type	Midplane EPROM Card.
MAC Addresses	Media Access Controller hexadecimal starting address in format: xx-xx-xx-xx-xx-xx.
MEC:	Midplane EEPROM Card.
Description	MEC.
Cisco Part Number	Cisco part number (nn-nnnnn-nn Ln).
UDI Serial Number	Unique Device Identifier (UDI) serial number [alphanumeric string].
UDI Product ID	UDI Product Identifier (PID) [alphanumeric string].
UDI Version ID	UDI version (alphanumeric string).
Midplane:	

Field	Description
Description	Midplane.
Cisco Part Number	Cisco part number (nn-nnnnn-nn Ln).
UDI Serial Number	UDI serial number (alphanumeric string).
Chassis:	
Description	Chassis.
Cisco Part Number	Cisco part number (nn-nnnnn-nn Ln).
UDI Serial Number	UDI serial number (alphanumeric string).
UDI Product ID	Cisco Product Identifier (PID) [alphanumeric string].
UDI Version ID	UDI version (alphanumeric string).
UDI Top Assem Num	UDI for top-level assembly.
Card Programmables	Indicates if the software on any of the programmable components on the card is not at the current revision. "up to date" – all software is current "out of date" – identifies one or more components do not have the most current software. "experimental/unreleased" – one or more components have experimental or unreleased software.
SDHC Flash	Secure Digital High Capacity on-board flash memory (/flash drive).
Type	Disk capacity in Mbytes.
Model	Generic-UltraFastMedia.
USB 1	Status of front panel USB port, for example. "Not Present".
SFP+ Module On Port <number>:	Information on the SFP+ transceiver in the specified port (10 through 29).
Transceiver Info	SFP+ transceiver type.
Vendor Info	Vendor Name and Vendor IEEE ID.
Part Info	Cisco PID and serial number.
System Status Card (SSC)	

Field	Description
Card Programmables	Indicates if the software on any of the programmable components on the card is not at the current revision. "up to date" – all software is current "out of date" – identifies one or more components do not have the most current software. "experimental/unreleased" – one or more components have experimental or unreleased software.
BCF	Board Control FPGA firmware.
Fabric and Storage Card (FSC)	
Card Programmables	Indicates if the software on any of the programmable components on the card is not at the current revision. "up to date" – all software is current "out of date" – identifies one or more components do not have the most current software. "experimental/unreleased" – one or more components have experimental or unreleased software.
BCF	Board Control FPGA firmware.

show hardware inventory (ASR 5x00)

Table 5: show hardware inventory Command Output Descriptions

Field	Description
Slot	Slot number of the specified card.
Type	Descriptor of the card in the specified slot.
Part Number	Starent or Cisco part number.
Product ID / Version ID	Cisco PID and version identifier.
Serial Number	Serial number of the card.
CLEI code	Common Language Equipment Identifier (CLEI) code.
Fan Tray (ASR 5500 only)	Lower Rear Lower Front Upper Rear Upper Front

show hardware version (ASR 5000)

Table 6: show hardware version Command Output Descriptions (ASR 5000)

Field	Description
Slot	Slot number of the specified card.
Type	Descriptor of the card in the specified slot.
Packet Processing Card	
SSCB	Slave Serial Control Bus (SSCB) firmware.
PSR, PSR2	Power, Status, and Reset firmware.
BIOS A	Basic Input/Output System A.
BIOS B	Basic Input/Output System B.
DT, DT2	Data Transport (DT) FPGA firmware.
System Management Card	
SRM	Status, Reset, and Monitoring (SRM) firmware.
BIOS A	Basic Input/Output System A.
BIOS B	Basic Input/Output System B.
On-Card	Version of the firmware that is on the boot flash for the component.
CIF-FPGA Running	Chassis Information (CIF) FPGA firmware that is currently operational.
Line Cards	
SSCB	Slave Serial Control Bus (SSCB) firmware.
FPGA	Field Programmable Gate Array.
On-Card	Version of the firmware that is on the boot flash for the component.
WPOS Running	WinPath Operational Software
Diagnostic Revisions	
On-Card	Version of the firmware that is on the boot flash for the component.
CPU 0 Running	Firmware that is currently operational on this CPU.

Field	Description
Fan Tray Controller Version	
Upper Fan Tray	UFT controller firmware.
Lower Fan Tray	LFT controller firmware.

show hardware version (ASR 5500)

Table 7: show hardware version Command Output Descriptions (ASR 5500)

Field	Description
Slot	Slot number of the specified card.
Type	Descriptor of the card in the specified slot – DPC, DPC2, MIO, MIO2, SSC, FSC.
BCF	Board Control FPGA firmware.
CAF	Control and Availability FPGA firmware.
CAF Rcry	CAF Recovery.
DCF A	Daughter Card FPGA A firmware.
DCF B	Daughter Card FPGA B firmware.
CPU	CPU number.
BIOS A	Basic Input/Output System A.
BIOS B	Basic Input/Output System B.
82599 A	Intel 10GbE Controller firmware.
82574 A	Intel Gigabit Ethernet Controller firmware.
PLX8618	PCIe Switch PROM.
N9485 A	Serial Attached SCSI Controller A, SPI (SCSI Parallel interface) Flash.
N9485 B	Serial Attached SCSI Controller B, SPI Flash.
CFE Flsh	Common Firmware Environment on /flash.
Fan Tray Controller Version	
Upper Fan Tray	UFT controller firmware (front and rear).
Lower Fan Tray	LFT controller firmware (front and rear).

show hardware version (VPC-DI)

Table 8: show hardware version (VPC-DI) Command Output Descriptions (VPC-DI)

Field	Description
Slot	Slot number of the specified card.
Type	Descriptor of the card in the specified slot – CFC or SFC.
CFE Flash	Version number of Common Firmware Environment.